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ABSTRACT

This report reviews the history of vocational evaluation services and practices and discusses the results of a survey of 61 vocational rehabilitation agencies conducted to determine the extent that rehabilitation technology resources and services are currently used in vocational evaluations. The survey asked general questions on the overall use of vocational evaluation services in vocational rehabilitation services and specific questions on the use of rehabilitation technology resources and services within the vocational evaluation process. Issues addressed include: reasons for using vocational evaluation services, types of assessments used in all vocational evaluations, frequency of use of rehabilitation technology specialists in each phase of the vocational evaluation process, when rehabilitation technology assessment typically occurs, rehabilitation technology services providers used in the evaluation process, types of modifications or accommodations made during the vocational evaluation process for individuals with severe disabilities, use of assistive technology aids and devices in vocational evaluations, and barriers limiting the use of rehabilitation technology in the vocational evaluation process. According to the survey's findings, the current use of technology resources within vocational evaluation is limited but there are indications that the field is realizing the importance of including rehabilitation technology in expected standards of practice. (Contains 14 references.) (CR)

# REHABILITATION TECHNOLOGY RESOURCES AND SERVICES: HOW WELL ARE WE USING THEM IN VOCATIONAL EVALUATION?

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## Abstract

Vocational evaluation practice remains essentially the same today as it was in the 1970's. Most evaluation programs rely primarily on psychological tests, work samples and behavioral observation as assessment tools. One important and relatively new resource, rehabilitation technology, offers vocational evaluators with the capacity to work more effectively with all individuals, particularly those with severe disabilities. However there is little evidence to suggest that rehabilitation technology is used extensively in most vocational evaluation programs. Determining to what extent rehabilitation technology resources and services are currently used in vocational evaluations was a major component of a comprehensive survey taken of vocational rehabilitation agencies. Findings from this survey describe what currently is taking place in evaluation programs which serve VR referrals. Analysis offers insights into utilization of rehabilitation technology-related in evaluation including identification of reasons why there has not been greater use of rehabilitation technology. Discussion of how to enhance the use of rehabilitation technology resources and services is included.

## Background

Vocational evaluation services have been a major component of comprehensive vocational assessments of individuals served by vocational rehabilitation since the late 1960's. Developing as an alternative to the more standard, and less flexible, psychometric testing, vocational evaluation gained prominence as an assessment tool which has been effective with persons with physical as well as cognitive disabilities (Pruitt, 1986). Much of the innovation of vocational evaluation was attributed to alternative assessment techniques, such as work samples and situational assessment. These assessment tools enabled vocational evaluators to have clients performs tasks that were similar to, and in some cases the same as, those required on actual jobs. This offered the obvious advantage of enhancing the opportunity to observe critical vocational behaviors and develop insights into how individuals performed using actual tools on simulated work tasks. The identity of vocational evaluation has become closely linked with use of these simulated work tasks, particularly the work sample approach, along with extensive utilization of psychological testing methods.

Today vocational evaluation practice remains relatively unchanged from what occurred during the mid-to-late 1970's. Computerized assessment systems have been added to many programs, however the content and procedures used in evaluations remain much the same. Although vocational evaluation is much more than testing, the most stringent premises that guide most evaluation practice still tend to go back to basic approaches such as work samples and standardized testing which rely heavily on norm-referenced comparisons. Leconte (1994), in reviewing effective vocational appraisal practices, notes that most of the basic practices of vocational evaluation can be traced to "parent" disciplines such as psychology. The influence of psychological testing may help to explain why current vocational evaluation practice relies so heavily on norm-referenced aptitude and achievement tests to make critical decisions, which in effect screen and narrow down vocational options that are considered. Chubon (1991) notes that jobs have tended to be ruled out due to established or normed performance levels. This use of set cut-off scores can unfairly restrict vocational options for many individuals. Thomas (1994) also noted that use of "standardized tests is of questionable validity for many individuals because of low reading levels, test anxiety, accommodation needs, lack of realism and concreteness". He agrees that these tests may in fact actually screen out individuals.

Weak and potential problem areas could be more appropriately dealt with through increased flexibility in the assessment process and through exploration of the use of rehabilitation technology resources and services. This would be most apparent in helping to identify ways that performance levels could be enhanced through use of some type of assistive aid or device. New technologies now make it possible to go beyond the capabilities of traditional evaluation practice to more effectively serve all individuals, particularly those persons with severe disabilities (Corthell & Griswold, 1987). Vocational opportunities for individuals with severe motor control deficits, lack of vision or limited physical tolerance are no longer restricted to menial

tasks or stereotyped job placements.

Rehabilitation Technology

Rehabilitation technology offers one of the most effective ways to enhance functioning levels of individuals with physical or cognitive limitations. Thomas (1981;1994) points out that many of the approaches which are basic to vocational evaluation, such as simulated and real-work situations, are effective in accurately evaluating vocational potential and direction. These approaches also have the added benefit of lending themselves very well to modification and try out of assistive aids and devices. Lightner (1994) notes that "increased use of technology has made it possible to expand accommodations and modifications in meeting the needs of people with severe disabilities." This can open new options for individuals with severe disabilities and enable vocational evaluators to be more creative in what can be attempted within the evaluation itself.

The 1992 Amendments to the Vocational Rehabilitation Act include a much stronger emphasis on "rehabilitation technology services" than ever before. There is little doubt that the availability and use of rehabilitation technology services will increase in VR agencies in the coming years. What is not clear is the relationship that these technology-related services will have with vocational evaluation activities. Rehabilitation technology is comprised of three main components: rehabilitation engineering; assistive technology aids and devices; and assistive technology services (1992 Amendments to the Rehabilitation Act). As noted by Reed, Fried, and Grimm (1993) these tools and strategies "offer a variety of ways to reduce, and in some cases eliminate, many of the functional limitations which restrict employment and independent living options for individuals served in vocational evaluation ."

Despite the potential benefit, evidence suggests that the majority of vocational evaluations continue to make limited use of assistive technology aids or devices as a direct part of the assessment process (Flynn, 1994). Without consideration and appropriate inclusion of assistive technology or rehabilitation technology services, it is difficult to conceive how "comprehensive" vocational evaluations can accurately identify feasible vocational options or determine if production expectations could be met.

A Look at Rehabilitation Technology and Vocational Evaluation Practice in VR Agencies

Answering the question of "how well are we using rehabilitation technology resources and services in vocational evaluation?" was approached from two perspectives. First, general questions were asked on the overall use of vocational evaluation services in VR agencies. Second, specific questions were presented which focused on the use of rehabilitation technology resources and services within the vocational evaluation process. This information was collected with the approval of the Council of State Administrators of VR agencies (CSAVR). A comprehensive three-part survey was sent to all 81 VR agencies in the fifty states and Trust territories. Section II, Assessment/Evaluation of VR Clients, gathered information that is used in this paper. The scope of survey approached rehabilitation technology use from the perspective of vocational rehabilitation agencies. Agencies were requested to include outside providers of vocational evaluation services as well as services delivered internally by their own employees. Reference to services and activities during fiscal year 1991-92 was used since this was the latest year that "911 data" describing state agency client service activity is available.

The other sections were used for various research activities of the Rehabilitation Engineering Research Center (RERC) on Rehabilitation Technology Applications in Vocational Rehabilitation. A complete summary of all survey data is published in the *General Report of Findings* (Flynn, 1994), which is available from the Center for Rehabilitation Technology Services.

Response to the survey was strong (75% return rate) and was evenly distributed across the United States. It was found that vocational evaluation services for VR clients are provided from diverse, widely differing settings. According to survey findings, agencies vary greatly in their use of vocational evaluations. Agencies reported as few as two percent and as many as 100% of their clients having vocational evaluations . On average, vocational evaluations are conducted on 31% of VR clients. Although this estimate of use appears low, Thomas (1994) acknowledges that vocational evaluations should be provided only when the client's occupational direction is in question. Vocational assessments conducted by rehabilitation counselors may be all that is needed to develop a rehabilitation plan. It is possible that the demand for vocational evaluation may increase due to the changes recommended in the 1992 Amendments to the Vocational Rehabilitation Act on eligibility and the need to obtain "clear and convincing evidence" to substantiate the performance

capabilities of persons with disabilities (Rehabilitation Act Amendments of 1992).

Vocational Evaluation Services in VR Agencies

One of the first questions attempted to determine why vocational evaluations are used in VR agencies. Table I indicates that vocational evaluations are used for a variety of purposes. The VR agencies were asked to rate the reasons on a five point scale: 1=Never; 2=Seldom; 3=Occasionally; 4=Frequently; and 5=Almost Always. This scale is used on several questions contained in the survey. The descriptive rating, mean rating, and range are reported in the table.

**TABLE I: Reasons for Using Vocational Evaluation Services**

| *Reasons* | *Rating* | *Mean and Range* |
|---|---|---|
| To help determine eligibility for VR services | Occasionally | M=3.0 Range 1-5 |
| To enable the client to have a more realistic understanding of him/herself as a worker | Frequently | M=4.0 Range 2-5 |
| To determine vocational and other client abilities and limitations | Almost Always | M=4.5 Range 3-5 |
| To determine which services are needed | Frequently | M=3.8 Range 1-5 |
| To develop an appropriate IWRP | Frequently | M=3.9 Range 1-5 |
| To improve the likelihood of employment | Frequently | M=3.9 Range 1-5 |

Table I shows that vocational evaluations are only occasionally used for determining eligibility for VR services. They are most frequently used to help the client and counselor have a better understanding of the client as a worker, to identify needed services, and to help improve employment opportunities. Not surprisingly, vocational evaluations are almost always used to determine vocational potential and other client abilities and limitations.

Comprehensive vocational evaluations were found to be composed of a variety of assessment techniques, depending on the purpose of the testing and the needs of the client. As Table II indicates, psychometric testing (66%), work samples (57%), and use of simulated work stations (47%) remain the primary assessment tools used.

**TABLE II: Types of Assessments Used in All Vocational Evaluations**

| *Type of Assessment* | *Rating* |
|---|---|
| Psychometrics | 66% |
| Work Samples | 57% |
| Simulated Job Stations | 47% |
| On-the-Job Evaluations | 22% |
| Physical Capacities Assessment | 43% |
| Learning Styles Assessment | 41% |
| Rehabilitation Technology Assessment | 24% |

It is interesting to note that of the more specialized assessment approaches such as physical capacities, learning styles assessment, and rehabilitation technology assessment, rehabilitation technology assessment is the least frequently used (24%). Use of on-job-evaluations (22%) was expected to be low due to wage and hour restrictions which make it difficult to arrange for short-term assessments with employers.

Use of Rehabilitation Technology in Vocational Evaluations

Several questions in the survey were designed to estimate the extent to which rehabilitation technology services were used in vocational evaluations. According to responses from the 41 agencies answering these questions, the actual use of rehabilitation technology resources and services appears limited. Only 18% of the agencies reported having policies requiring vocational evaluators to consider services from a rehabilitation technology specialist during the vocational evaluation process. In addition, only 14 (26%) of the VR agencies surveyed have policies which actually reference the use of rehabilitation technology services in vocational evaluations. This limited use of rehabilitation technology assessment within comprehensive vocational evaluations does appear to confirm that rehabilitation technology is not an integral component of most vocational evaluations (Flynn, 1994).

Very few VR agencies (14%) have a standard screening process for identifying clients who might need rehabilitation technology services. Although 72% of the respondents reported that they had rehabilitation technology specialists available, on average, these specialists were brought in to work with only 17%

(range = 1-90%) of cases during fiscal year 1991-92. A question in another part of the survey also asked about the extent of use of rehabilitation technology specialists during vocational evaluation. Once again, only occasional involvement was reported (2.8 on a 5 point scale). This does not, however, take into account technology-related services that vocational evaluation staff may directly provide.

A follow-up question on where in the evaluation process rehabilitation technology specialists were used verifies that their use is limited in all stages of the vocational evaluation process. As can be seen in Table III, the only phase in the vocational evaluation process where there is even "occasional" use of rehabilitation technology specialists is in Outcomes/Recommendations. This would suggest that use of rehabilitation technology within the actual assessment process may be even more limited.

**TABLE III: Frequency Use of Rehabilitation Technology Specialists in Each Phase of the Vocational Evaluation Process**

| *Phase* | *Rating* | *Mean and Range* |
|---|---|---|
| Pre-Evaluation Staffing | Seldom | M=1.7 Range 1-5 |
| Initial Interview | Never | M=1.4 Range 1-2 |
| Evaluation Planning | Seldom | M=2.0 Range 1-5 |
| Assessment | Seldom | M=2.4 Range 1-5 |
| Career Exploration | Seldom | M=2.1 Range 1-5 |
| Outcomes/Recommendations | Occasionally | M=3.3 Range 1-5 |

The range of responses indicates some variation among agencies in the use of rehabilitation technology specialists in the vocational evaluation process. A few agencies almost always utilize these specialists and a few report never using them. This variation could indicate that the lack of suggested guidelines on how rehabilitation technology services could be integrated into case service activities may be contributing to inconsistent use.

It is likely that rehabilitation technology services are being made available to VR clients separate from vocational evaluation services. Seventy-six percent of the agencies indicated that rehabilitation technology assessments are conducted separately from the vocational evaluation. As can be seen in Table IV, most are conducted after vocational evaluations are completed, while only 35% are conducted during vocational evaluation.

**TABLE IV: When Rehabilitation Technology Assessment Typically Occurs**

| | |
|---|---|
| Before vocational evaluation | 43% |
| During vocational evaluation | 35% |
| After vocational evaluation | 33% |

Another indicator of the extent of systematic inclusion of rehabilitation technology into vocational evaluation practice is the frequency of documentation of technology-related information in reports. The formats of reports, especially where sections are designated to address specific considerations, vary significantly. Twenty agencies (36%) reported vocational evaluators are required to utilize a standardized vocational evaluation report. When asked how rehabilitation technology services are incorporated into this report, eight agencies (40%) said they include it in the narrative section, two (10%) include it as part of a checklist, 16 (80%) include it as part of the recommendations section, and four agencies (20%) said no reference is routinely made. Unless evaluation protocols and reports specifically acknowledge rehabilitation technology in some way, there is a strong possibility that these resources and services will not be adequately considered during the evaluation process.

Rehabilitation Technology Specialists: When the need for rehabilitation technology services is identified in the vocational evaluation process, there are a variety of professionals that vocational evaluators may be able to use to provide technology-related assistance. Table V shows which professionals are most likely to be utilized.

**TABLE V: Rehabilitation Technology Services Providers Used in the Evaluation Process**

| *Technology Provider* | *Rating* | *Mean and Range* |
|---|---|---|
| Rehabilitation engineer | Occasionally | M=3.3 Range 1-5 |
| Assistive technology specialist/ rehabilitation technologist | Occasionally | M=3.3 Range 1-5 |
| Occupational therapist | Occasionally | M=2.8 Range 1-5 |
| Physical therapist | Occasionally | M=2.6 Range 1-4 |
| Speech/Language Pathologist | Occasionally | M=2.5 Range 1-4 |

These data indicate that all the professional staff listed are used with the same average frequency. Looking at the range of use reported, only speech/language pathologists were used by everyone in the sample, and no less than occasionally by anyone. In contrast, no one said they almost always used physical therapists to provide rehabilitation technology services but many respondents

said they used other professionals almost always. Respondents reported that they use other professionals not listed above. These include: optometrists or ophthalmologists, industrial engineers, and rehabilitation teachers.

Role of the Vocational Evaluator in Making Accommodations: Although the use of rehabilitation technology specialists such as rehabilitation engineers in the evaluation process was found to be limited, there was indication that vocational evaluators themselves may be providing some of the accommodations and adaptations needed. As Parhamovich (1993) noted, many simple, low cost accommodations can be done by vocational evaluators without requiring assistance from a rehabilitation technology specialist. For example, someone with severe motor coordination problems would not easily be able to independently complete a standard pencil and paper test. Poor performance could be attributed to lack of ability where in reality it could be due to difficulty in stabilizing the answer sheet or accurately marking appropriate boxes. Basic accommodation needs for alternative formats or physical access to appropriate height work stations are often overlooked within the evaluation itself.

Questions were included on the survey to determine if assistive technology is routinely used in the assessment process and if so, what are the conditions or issues surrounding that use. Table VI indicates, on average, how often various modifications/ accommodations are made for individuals with severe disabilities in the vocational evaluation process.

**TABLE VI: Types of Modifications or Accommodations are Made During the Vocational Evaluation Process for Individuals with Severe Disabilities**

| *Modification/Accommodation* | *Rating* | *Mean and Range* |
|---|---|---|
| Modify the testing schedule | Frequently | M=3.7 Range 2-5 |
| Select alternate tests | Frequently | M=3.6 Range 2-5 |
| Delete tests | Occasionally | M=3.4 Range 1-5 |
| Modify the tests | Occasionally | M=3.4 Range 2-5 |
| Modify the testing environment | Frequently | M=3.5 Range 2-5 |
| Utilize an aid or assistant | Occasionally | M=3.2 Range 1-5 |

These data indicate that modifications are often made for individuals with severe disabilities. Moreover, all types of modification are made with the same frequency. The ranges of responses are interesting in that they indicate only two modifications are never used by evaluators; deleting tests, and using an aid or assistant. Otherwise all evaluators have made other modifications at some time or another. Since rehabilitation technology specialists are used in only 17% of the cases, it is assumed that the vocational evaluator would be the primary staff member involved in providing reasonable accommodations. Two of the accommodations most frequently used, lengthening/modifying the schedule and selecting alternative tests, could be completed without any specialized type of assistive technology.

Availability of Assistive Technology Aids and Devices: Without direct access to assistive technology aids and devices it is difficult for vocational evaluators to give appropriate consideration to technology-related options within the evaluation process. When asked if the aids and devices are available to all vocational evaluators it was clear that consistent access is limited (Flynn, 1994). It appears that resources are not all that widespread with only seven agencies (13%) reporting that aids and devices are available at all sites across the state. Only another 13 (23%) reported availability at most sites. The majority (61%) have resources at selected sites only, with only two agencies reporting that aids and devices for vocational evaluation were not available at all.

Table VII offers a preliminary look at how often various assistive technology aids and devices are used for individuals with severe disabilities in vocational evaluation services. This is only a rough estimate however it does help to form a picture of how assistive technology is being used.

TABLE VII: Reported Use of Assistive Technology Aids and Devices in Vocational Evaluations With Individuals with Severe Disabilities

| *Aid or Device* | *Rating* | *Mean and Range* |
|---|---|---|
| Adapted furniture | Occasionally | M=2.7 Range 1-5 |
| Adapted switches/ controls | Seldom | M=2.4 Range 1-4 |
| Alternative computer access hardware/ software | Occasionally | M=2.9 Range 1-5 |
| Assistive listening devices | Occasionally | M=2.5 Range 1-5 |
| Electronic communication devices | Occasionally | M=2.5 Range 1-5 |
| Environmental control device | Seldom | M=2.0 Range 1-5 |
| Jigs/fixtures | Occasionally | M=2.8 Range 1-5 |
| Manual communication aids | Occasionally | M=2.7 Range 1-5 |
| Specialized hand tools | Seldom | M=2.4 Range 1-5 |
| Specialized seating | Occasionally | M=2.7 Range 1-5 |
| Standing/walking aids | Occasionally | M=2.8 Range 1-5 |
| Telephone communication aids | Occasionally | M=2.6 Range 1-5 |
| Visual/magnification/ reading aids | Frequently | M=3.5 Range 1-5 |
| Wheeled mobility | Occasionally | M=2.9 Range 1-5 |
| Writing aids | Occasionally | M=3.1 Range 1-5 |

These data indicate that almost all of the aids and devices listed in Table VII are used at some time during the vocational evaluation process and most are used at least occasionally. Only visual aids are used frequently, reflecting the large number of individuals with vision impairments served by some VR agencies. Environmental control units, adapted switches/controls, and specialized hand tools are all, on average, seldom used. It is important to note the ranges of use indicating that all devices except for adapted switches/controls are almost always used by at least some vocational evaluators. The contrasting side to this is that each device was ranked as never used by at least a few vocational evaluators. These data do not tell us whether or not there are some vocational evaluators who use devices routinely or others who rarely use aids and devices (Flynn, 1994).

## Barriers to the Use of Rehabilitation Technology

Attempts were made to determine why the use of rehabilitation technology was not greater than indicated. As can be seen in Table VIII, multiple barriers influence the use of rehabilitation technology; however, no one barrier stood-out more than others. It is interesting to note that limited funds were seldom considered a barrier to providing these services. This contrasts with informal feedback from rehabilitation staff who frequently cite cost as a concern. There was individual variation in the experience of barriers as reflected in the ranges for every barrier. Some agencies reported never experiencing some of the barriers, while other almost always experienced some of the barriers.

**TABLE VIII: Barriers Limiting Use of Rehabilitation Technology in the Vocational Evaluation Process**

| *Barrier* | *Rating* | *Mean and Range* |
|---|---|---|
| Rehabilitation technology specialist not available | Occasionally | M=3.0 Range 1-5 |
| Assistive technology aids and devices not available | Occasionally | M=3.1 Range 1-5 |
| Insufficient time to include within the vocational evaluation | Occasionally | M=2.8 Range 1-5 |
| Vocational evaluators do not identify needs | Occasionally | M=3.0 Range 1-5 |
| Limited funds for rehabilitation technology services | Seldom | M=2.4 Range 1-5 |
| Norm-referenced tests allow only specified changes | Occasionally | M=2.5 Range 1-5 |
| Limited knowledge by vocational evaluators about rehabilitation technology services by staff | Occasionally | M=3.2 Range 1-5 |

Leconte (1994) in her investigation of collaboration suggests several barriers which could account for the limited use of rehabilitation technology within vocational evaluation programs; fear and resistance to change, reluctance to try new or unfamiliar approaches and limited awareness due to lack of training and education. Although definitive data is not available to verify this, a primary factor suspected is the limited awareness of rehabilitation technology by vocational evaluation staff. Another likely issue concerns the possibility of "invalidating" comparative norms by modifying standardized procedures or by using aids or devices. Further investigation directly with practicing vocational evaluators would be necessary to determine why technology resources and services are not used more in evaluations.

Summary

Overall, the systematic inclusion of rehabilitation technology into vocational evaluation practice within vocational rehabilitation agencies is limited. Although there are vocational evaluation programs which appear to utilize rehabilitation technology effectively, evidence suggests that these resources are still not consistently identified as part of accepted vocational evaluation practice. In many respects, vocational evaluation appears to reflect where the total rehabilitation field stands in the recognition and use of rehabilitation technology.

Anticipating Change: What Should Vocational Evaluation Be Doing?

As a field, vocational evaluation is encountering a rapidly changing landscape of service delivery expectations, client populations and professional identity. Frequently, more questions are being asked regarding the role that vocational evaluation should play in rehabilitation services. Despite a history of being an effective resource and an integral component of the rehabilitation process, growing perceptions by rehabilitation counselors and others question the value of vocational evaluation (Lee, et al. 1994). Lee reported that "VR counselors appear to most value vocational evaluation information related to the physical status of the client". Their findings further indicate that VR counselors consider much of the traditional evaluation information related to client aptitudes, interests and skills as being less important than assessment of the functional aspects of the client. Traditional evaluation techniques have been found to focus more on what individuals are not able to do, particularly those person with severe disabilities (Langton, 1991; Schuler & Perez, 1991). It is vital that the methods and approaches used in the delivery of vocational evaluation services, including the role of rehabilitation technology, be carefully reviewed.

The standard demanded of employers to provide reasonable accommodations in their employment practices also applies to vocational evaluation. With implementation of the American's with Disabilities Act (ADA), rehabilitation service programs are expected to provide necessary accommodations. This would include providing accommodations within the assessment process as well as consideration of how rehabilitation technology services could be incorporated into recommendations and suggested follow-up.

Making adaptations to maximize the capabilities of individuals should be a basic tenet of vocational evaluation practice. The emphasis in vocational evaluation programs should be on determining what individuals can do: identifying strengths; verifying limitations; estimating physical and mental capabilities; and estimating learning and skill acquisition potential.

Many options exist for the inclusion of rehabilitation technology into vocational evaluation services. Langton (1991) identified five *Tech Points* where technology applications should be considered and six levels of involvement with technology-related activities that vocational evaluation programs could offer. Although it would not be realistic to expect that all vocational evaluation programs offer comprehensive rehabilitation engineering services, it is reasonable to expect that technology resources and services be considered with any vocational evaluation services.

Role of the Vocational Evaluator: In addition to being known for using work samples and situational assessment techniques, vocational evaluators would benefit by gaining recognition for using rehabilitation technology resources and services as a regular part of their evaluations. Vocational evaluators, by nature of both their training and job responsibilities, are excellent candidates to take a leadership role in promoting use of technology-related resources in the rehabilitation process. With the possible exception of the rehabilitation counselor, the vocational evaluator would be the rehabilitation professional in the best position to identify need for rehabilitation technology. With the increased emphasis on serving individuals with severe disabilities, comprehensive assessment such as vocational evaluation functions as a critical entry point into the rehabilitation process where the need for rehabilitation technology should be identified.

Responsibilities of the vocational evaluator should include identifying ways that an individual can most effectively perform a job or specific task or duty. The emphasis in vocational evaluation programs should be on what the individual can do: identifying strengths; verifying limitations; estimating physical and mental capabilities; and estimating learning and skill acquisition potential. This could include the use of various technologies, tryout of adaptive equipment or attempts of different strategies to best accommodate specific functional limitations.

Determining ways to enhance the performance capabilities of individuals is one of the most important applications of rehabilitation technology in vocational evaluation. Frequently, traditional assessment practice stresses standardization to such a degree that many vocational evaluators are reluctant to modify or change assessment tools (Chubon, 1991). With individuals who have only minimal functional limitations this usually does not present serious problems. However, persons with severe disabilities who have multiple functional limitations often will be unable to perform tasks without use of some type of assistive aid or device. Thomas (1991) acknowledges that vocational evaluators should be able to modify instruments and techniques to accommodate and facilitate client performance.

## Interdisciplinary Practice: Considerations for Rehabilitation Technology

Recent activity of the Interdisciplinary Council is one positive indication that the field of vocational evaluation is seriously examining its role, function and relationship to other disciplines (Schuster & Smith, 1994). Specific consideration should be given to inclusion of technology-related responsibilities within the *Guiding Principles* to help define "best" practice. Leconte (1994) states that vocational evaluation and assessment programs should take a leadership role toward increased collaboration and interdisciplinary practice. Leconte notes that the existence of assistive technology in many vocational evaluation programs could not be possible without the shared expertise and resources resulting from collaborative interaction with other disciplines. Assuming a proactive stance regarding the importance of including rehabilitation technology will be beneficial to the continued growth and development of vocational evaluation.

The *Task Force on Rehabilitation Technology*, established by VEWAA, would appear to be the most appropriate entity to foster the inclusion and development of technology resources and services into vocational evaluation practice. The goals of the Task Force include the development of a position paper which will outline VEWAA's stance regarding rehabilitation technology. In addition, their responsibility includes: examination of current uses and practices of rehabilitation technology in the evaluation process; serving as an information dissemination network; and providing guidance for VEWAA training objectives relevant to rehabilitation technology.

Recognition of the technology-related role for vocational evaluators is also reflected in the ***CCWAVES** Standards & Procedures Manual for Certification (1994)*. One of the Knowledge and Performance Areas required for certification as a vocational evaluator, *Modification and Accommodations*, specifically addresses assistive technology and other technology-related competencies.

## Conclusions

Rehabilitation technology should be an integral part of any vocational evaluation service. Attempts to provide comprehensive assessment services without consideration of, and appropriate use of, assistive aids or devices or other accommodations, should no longer be accepted. Technology-related resources are indispensable if vocational evaluation is to adequately meet the needs of persons with severe disabilities. Although the survey found that current use of technology resources within vocational evaluation remains limited, there are indications that the field is realizing the importance of including rehabilitation technology in expected standards of practice.

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